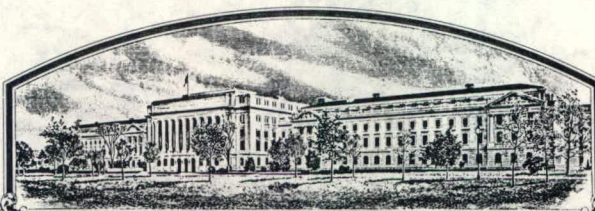


No.



8300132

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Stauffer Chemical Company**

Whereas, THERE HAS BEEN PRESENTED TO THE

**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (U.S.C. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SUNFLOWER

'SS405B'



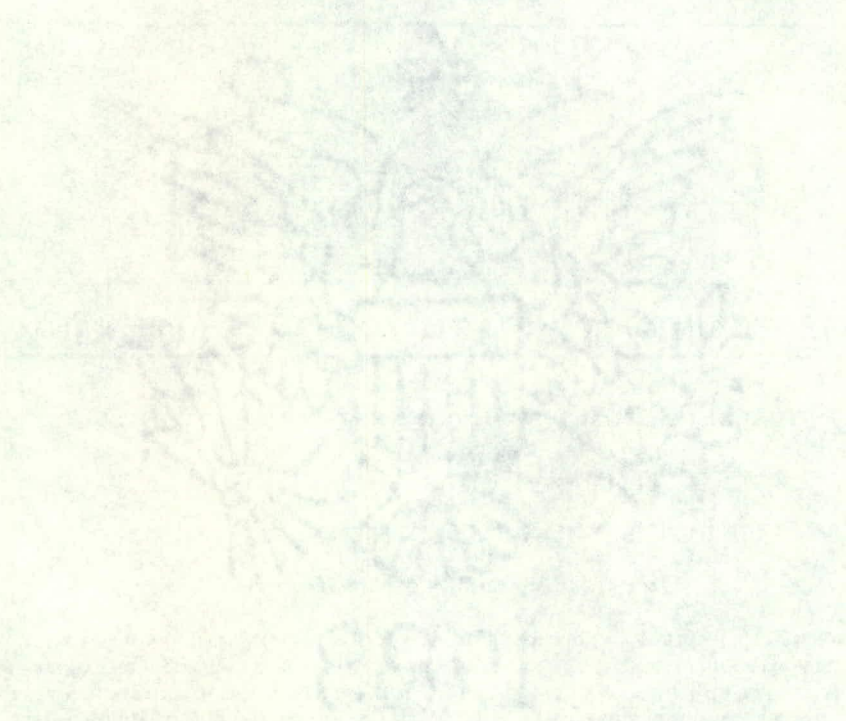
Attest:

*Kenneth H. Egan*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 27th day of January in the year of our Lord one thousand nine hundred and eighty-four.

*John R. Block*  
Secretary of Agriculture







U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN & SEED DIVISION

FORM APPROVED: OMB NO. 0581-0005

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

|  |   |  |   |
|--|---|--|---|
| 1. NAME OF APPLICANT(S)<br>Stauffer Chemical Company   |   | 2. TEMPORARY DESIGNATION                       | 3. VARIETY NAME<br>SS405B   |
| 4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)<br>Westport, Connecticut 06881                                  |   | 5. PHONE (Include area code)<br>(415) 231-1017 | FOR OFFICIAL USE ONLY<br>PVPO NUMBER<br>8300132   |
| 6. GENUS AND SPECIES NAME<br>Helianthus annuus   | 7. FAMILY NAME (Botanical)<br>Asteraceae (Compositae) |  | FILING<br>DATE<br>5/12/83<br>TIME<br>2:30 <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M.            |
| 8. KIND NAME<br>Sunflower, oil type inbred line  | 9. DATE OF DETERMINATION<br>September, 1981           |  | FEES RECEIVED<br>AMOUNT FOR FILING<br>\$ 1,000<br>DATE<br>5/12/83<br>AMOUNT FOR CERTIFICATE<br>\$ 500.00<br>DATE<br>12/2/83 |
| 10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)<br>Corporation |   |  | 12. DATE OF INCORPORATION   |
| 11. IF INCORPORATED, GIVE STATE OF INCORPORATION<br>Delaware   |   |  |   |

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Elliott L. Fineman  
Stauffer Chemical Company  
1200 South 47th Street  
Richmond, California 94806

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. ☒ Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)

c. ☒ Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)

b. ☒ Exhibit B, Novelty Statement

d. ☒ Exhibit D, Additional Description of the Variety

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.)

☒ Yes (If "Yes," answer items 16 and 17 below)

☒ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ Yes

☒ No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☒ Foundation

☐ Registered

☐ Certified

18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES?

☐ Yes (If "Yes," give names of countries and dates)

☒ No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES?

☐ Yes (If "Yes," give names of countries and dates)

☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT

Elliott L. Fineman

DATE

1

SIGNATURE OF APPLICANT

DATE



## INSTRUCTIONS

**General:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$1000 fee ( \$500 *filing fee* and \$500 *examination fee*) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

### Item

- 9 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 15 If "Yes" is specified (*seed of this variety be sold by variety name only as a class of certified seed*) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

MAY 12 1983



DE GUIGNÉ  
TECHNICAL CENTER  
WESTERN RESEARCH



# Stauffer Chemical Company

1200 S. 47th St. / Richmond, CA 94804 / Tel. (415) 231-1000 / TWX (910) 382-8174

October 7, 1983

Dr. Joseph J. Higgins, Examiner  
Plant Variety Protection Office  
National Agricultural Library Building  
Beltsville, Maryland 70705

Dear Dr. Higgins:

RE: Sunflower Application  
8300132, 'SS405B'  
Our Ref: PR-7162

---

Responsive to your letter of September 19, 1983 requesting a statement of the differences between 'SS405B' and H3136 released by Dr. Beard, I am submitting the following information obtained from David Ferguson, Ph.D. the breeder of 'SS405B'.

Dr. Beard's H3136 was a heterogeneous germ plasm release whereas 'SS405B' is a non-segregating inbred line.

H3136 contained many different phenotypes and was not inbred for more than two generations. Significantly, the H3136 release had various combinations of restoration genes and correspondingly had various phenotypes giving full restoration, leakers (partial restoration) and non restoration. By contrast, 'SS405B' lacks restoration genes and is used as a maintainer line for its male sterile counterpart.

Sincerely,

A handwritten signature in dark ink, appearing to read "Elliott L. Fineman", with a long horizontal flourish extending to the right.

Elliott L. Fineman

ELF/cdo

cc: David B. Ferguson



RECEIVED

OCT 17 1983







June 22, 1983

Mr. Joseph J. Higgins, Examiner  
Plant Variety Protection Office  
United States Department of Agriculture  
National Agricultural Library Building  
Beltsville, MD., 20705

Dear Mr. Higgins:

Re: Response Under 7 CFR Section 180.20 to  
Request for Additional Information in  
Sunflower Application No. 8300132, 'SS405B'  
Our Ref: PR-7162

---

Responsive to the request, mailed from your office June 1, 1983 for additional information in the above-indicated application, listed below are the answers to the questions posed in your request.

1. In Exhibit A, there are no variants.
2. The high degree of homozygosity and homogeneity does insure that SS405B is stable in its characteristics, remaining the same from one sexual generation to another.
3. The parent line received from Dr. Beard was the 1974 USDA release H3136.
4. Supportive data for Exhibit B are set out on the attached page.
5. For item 4 in Exhibit C, the variety displays no branching.

It is believed that the information furnished above, and on the attached sheet, is fully responsive to the request for additional information mailed from your office on June 1, 1983. In the event that further information is required, please contact the undersigned at the above-indicated address, or call collect by telephone at (415) 231-1017.

Sincerely,

A handwritten signature in cursive script, appearing to read "Elliott L. Fineman", followed by a horizontal line.

Elliott L. Fineman  
Patent Attorney

ELF/cjn  
Attachment



6-27-83

Plant Height Data

| <u>Line</u> | <u>1982 Fresno, CA. Row No.</u> | <u>Height of Ten Plants (in Centimeters)</u> | <u>AVG.</u> |
|-------------|---------------------------------|--|-------------|
| SS405B      | 4745                            | 65 75 65 70 70 70 75 70 70 65                | 70cm        |
| HA 89B      | 4673                            | 100 95 95 90 90 95 85 115 90 80              | 94cm        |

Ray Flower Length Data

| <u>Line</u> | <u>1982 Fresno, CA Row No.</u> | <u>Length of 15 Ray Flowers (Three rays<br/>From Each of Five Individual Plants)</u> | <u>AVG.</u> |
|-------------|--------------------------------|--|-------------|
| SS405B      | 4745                           | 48mm 47 47 51 47 51 48 42 47 42 44<br>43 43 45 48                                    | 46.2mm      |
| HA89B       | 4673                           | 63mm 65 63 60 62 54 60 58 57 59 59<br>60 64 63 67                                    | 60.9mm      |



STATION  
(CORREABLE)  
HOLD  
RECEIVED  
JUN 20 1983

6-27-83

600



EXHIBIT A

Stauffer Seeds (SS)405B is the maintainer component of a specific female parent inbred line of Helianthus annuus. This line was derived by the pedigree method of breeding using bag isolation to attain self pollination. Eight generations of selfing were imposed on this line to attain a high degree of homozygosity and homogeneity. This line was derived from germplasm released by Dr. Beard, USDA in 1974.



5210084

EAGLE  
AGAWAM BOND  
100% COTTON FIBER USA

MAY 12 1983

EXHIBIT B

'SS405B' is most similar to 'HA89'. 'SS405B' differs from 'HA89' in having anthocyanin pigmentation of the stigmas, is 23 cm shorter and the rays are 14.7 mm shorter.



2010008

100% COTTON FIBRE 12A

VERMAY HOLD

EVERETT

MAY 12 1983

EXHIBIT D

'SS405B' is the maintainer component of a female oil type sunflower inbred line. This line exhibits earliness itself and transfers earliness to its hybrid progeny.

'SS405B' exhibits excellent general combining ability with materials derived from the Texas and Canada Morden germplasm releases as gene pools.

'SS405B' exhibits less than 10% dormancy one week after harvest.

'SS405B' exhibits a very high degree of self-compatibility and as a consequence, high seed set percentages.

The flag leaf of 'SS405B' is a distinctive mark as it's petiole is nearly vertical at the neck crook of the plant.

'SS405B' has weakly fused anther cylinders which tend to tear apart at anthesis.

'SS405B' has a rapid dry down of the seed at maturation and contributes this character to its hybrid progeny.

The semi-dwarf character is carried well into the hybrid progeny and contributes to 'SS405B' ability to resist lodging.



8-300125

EAGLE  
AG-4000 BOND  
100% COTTON FIBER USA

MAY 12 1993

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(SUNFLOWER)

**OBJECTIVE DESCRIPTION OF VARIETY**  
SUNFLOWER (*HELIANTHUS ANNUUS*)

|   |   |
|---|---|
| NAME OF APPLICANT(S)<br>Stauffer Chemical Company   | VARIETY NAME OR TEMPORARY DESIGNATION<br>SS405B               |
| ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)<br>Westport, Connecticut 06881 | <b>FOR OFFICIAL USE ONLY</b><br>PVPO NUMBER<br><b>8300132</b> |

Place numbers in the boxes (e.g. ) for the characters that best describe typical plants of this variety. The symbol ▲ indicates decimal.

## COMPARISON VARIETIES

NON-OIL: 1 = ARROWHEAD 2 = MINGREN 3 = SUNDAK  
OIL: 4 = PEREDOVIK 5 = KRASNODARETS 6 = OTHER HA89

## 1. CLASS:

1 = OIL TYPE 2 = NON-OIL TYPE (confectionery)

## 2. MATURITY:

|  |   |
|--|---|
| <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="0"/> NO. OF DAYS TO HEAD FIRST VISIBLE<br>(from emergence) | <input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="3"/> NO. OF DAYS TO HARVEST RIPENESS (from emergence) |
| <input type="text" value="0"/> <input type="text" value="3"/> DAYS EARLIER THAN <input type="text" value="6"/>                                     | <input type="text" value="0"/> <input type="text" value="6"/> DAYS EARLIER THAN <input type="text" value="6"/>                                |
| HEADING SAME AS <input type="text"/>   | MATURITY SAME AS <input type="text"/>   |
| <input type="text"/> <input type="text"/> DAYS LATER THAN <input type="text"/>   | <input type="text"/> <input type="text"/> DAYS LATER THAN <input type="text"/>  |

## 3. HEIGHT:

|  |   |
|--|---|
| <input type="text" value="0"/> <input type="text" value="7"/> <input type="text" value="0"/> cm TALL AT HARVEST RIPENESS | <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="3"/> cm SHORTER THAN <input type="text" value="6"/> |
|  | SAME AS <input type="text"/>  |
|  | <input type="text"/> <input type="text"/> <input type="text"/> cm TALLER THAN <input type="text"/>  |

## 4. STEM:

|  |   |
|--|---|
| <input type="text" value="0"/> <input type="text" value="6"/> <input type="text" value="3"/> LENGTH OF INTERNODE AT HARVEST RIPENESS         | <input type="text" value="2"/> <input type="text" value="2"/> NUMBER OF LEAVES                                |
| <input type="text" value="2"/> <input type="text" value="2"/> <input type="text" value="0"/> CM. SHORTER THAN <input type="text" value="6"/> | <input type="text"/> <input type="text"/> FEWER LEAVES THAN <input type="text"/>                              |
| SAME AS <input type="text"/>   | SAME AS <input type="text"/>  |
| <input type="text"/> <input type="text"/> <input type="text"/> CM. LONGER THAN <input type="text"/>  | <input type="text" value="0"/> <input type="text" value="5"/> MORE LEAVES THAN <input type="text" value="6"/> |

BRANCHING:  1 = NO BRANCHING 2 = BASAL BRANCHING  
3 = TOP BRANCHING (with central head) 4 = FULLY BRANCHED (without central head)

COLOR OF GROWING POINT: 1 = GREEN 2 = YELLOW



## 9. DISEASE AND INSECTS (0 = Not tested, 1 = Susceptible, 2 = Resistant):

☒ 1 RUST (*Puccinia helianthi*)

GIVE RACES: \_\_\_\_\_

☒ 1 VERTICILLIUM WILT (*Verticillium dahliae*)☒ 1 DOWNY MILDEW (*Plasmopara halstedii*)☐ 0 WHITE BLISTER RUST (*Albugo tragopogi*)☐ 0 BROOM RAPE (*Orobanche cannis*)

GIVE RACES: \_\_\_\_\_

☐ 0 EUROPEAN SUNFLOWER MOTH (*H. nebullela*)☐ OTHER (specify) \_\_\_\_\_☒ 1 SCLEROTINIA WILT (*Sclerotinia sclerotiorum*)☐ 0 LEAF MOTTLE (*V. albo-atrum*)☐ 0 GRAY-MOLD BLIGHT, BUD ROT (*Botrytis cinerea*)☐ 0 CHARCOAL ROT, STEM ROT (*Macrophomina phaseolina*)☒ 1 SUNFLOWER MOTH, N. AMERICAN HEAD MOTH  
(*Homoeosoma electellum*)☐ OTHER (specify) \_\_\_\_\_☐ OTHER (specify) \_\_\_\_\_

## 10. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE SUBMITTED VARIETY. For the following characteristics

indicate degree of resemblance by placing in the column marked, D.R., one of the following numbers:

1 = Submitted variety is less, lighter or inferior than comparison variety 2 = Same as 3 = More than, darker, or superior

| CHARACTER             | VARIETY | D.R. | CHARACTER             | VARIETY | D.R. |
|-----------------------|---------|------|-----------------------|---------|------|
| Frost resistance      |         |      | Leaf attitude         | RHA 273 | 2    |
| Lodging resistance    | HA 89   | 2    | Head attitude         | HA 89   | 2    |
| Neck or stem strength | HA 89   | 3    | Ray flower color      | HA 89   | 2    |
| Branching type        | HA 89   | 2    | Seed shape            | HA 89   | 2    |
| Petiole length        | HA 89   | 1    | Seed color            | RHA 274 | 2    |
| Leaf shape            | HA 89   | 2    | Seed striping pattern | RHA 274 | 2    |
| Leaf color (green)    | HA 89   | 2    | Seed yield            | HA 89   | 1    |

## 11. GIVE THE FOLLOWING DATA FOR SUBMITTED AND A SIMILAR VARIETY\*.

| VARIETY                 | HULL (%) | PROTEIN (%) | OIL (%) | IODINE NO. | FATTY ACIDS |              |
|-------------------------|----------|-------------|---------|------------|-------------|--------------|
|                         |          |             |         |            | OLEIC (%)   | LINOLEIC (%) |
| Submitted               |          |             | 37      |            |             |              |
| Similar                 |          |             | 45      |            |             |              |
| Name of similar variety |          |             | HA 89   |            |             |              |

\* Hull, protein and oil percentages expressed for whole undecorticated seed; acids expressed as percentages of oil

## 12. COMMENTS:

Excellent lodging resistance  
 Weakly fused anther cylinder  
No anthocyanin in hypocotyl

**ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATE**

THIS ASSIGNMENT made this 23 day of March, 1987, by Stauffer Chemical Company, a Delaware corporation with principal offices at Nyala Farm Road, Westport, Connecticut 06881-0850, (hereinafter referred to as "Stauffer");

**W I T N E S S E T T H :**

WHEREAS, Stauffer is the owner by assignment of the entire right, title and interest in and to the invention for which was issued the following United States Plant Variety Protection Certificate:

**Certificate**

| <u>Number</u> | <u>Issue Date</u> | <u>Inventor (s)</u> | <u>Title</u>                     |
|---------------|-------------------|---------------------|----------------------------------|
| 8300132       | January 27, 1984  | David B. Ferguson   | In Bred Sunflower<br>Line SS405B |

WHEREAS, NORTHRUP KING CO., a Delaware corporation, having its principal offices at 7500 Olson Memorial Highway, Golden Valley, MN. 55427 hereinafter referred to as "Northrup" is desirous of acquiring the entire right, title and interest for the United States in and to said invention for which the aforesaid United States Plant Variety Protection Certificate was issued;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, and in partial fulfillment of its obligations under a certain contract between Stauffer and Northrup King Company, Stauffer





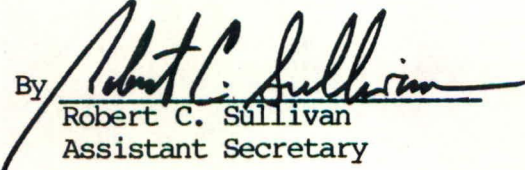
does hereby sell, assign, transfer, set over and convey unto Northrup all right, title and interest for the United States in and to said invention and in, to and under the aforesaid United States Plant Variety Protection certificate reissue, modification and extension thereof.

ALL OF THE FOREGOING to be held and enjoyed by Northrup for its own use and for the use of its successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by said Stauffer if this transfer to Northrup had not been made.

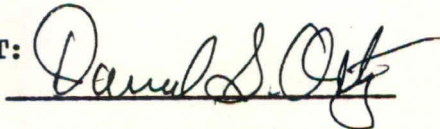
IN WITNESS WHEREOF, Stauffer has caused this instrument of assignment to be executed and its corporate seal to be hereunto affixed.

STAUFFER CHEMICAL COMPANY

By

  
Robert C. Sullivan  
Assistant Secretary

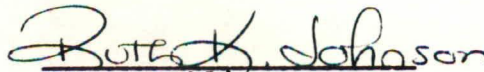
ATTEST:  
BY



THE STATE OF CONNECTICUT  
COUNTY OF FAIRFIELD

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared ROBERT C. SULLIVAN, ASSISTANT SECRETARY of Stauffer Chemical Company, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of such Corporation, and that he executed the same for and as the act of such Corporation for the purposes and consideration therein expressed and in the capacity therein stated.

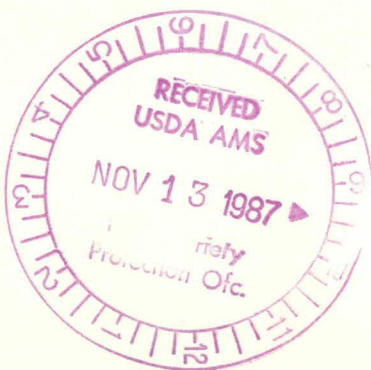
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 23<sup>rd</sup> day of March, 1987.

  
Notary Public

RUTH K. JOHNSON  
NOTARY PUBLIC

NOTARY PUBLIC LICENSE #1990

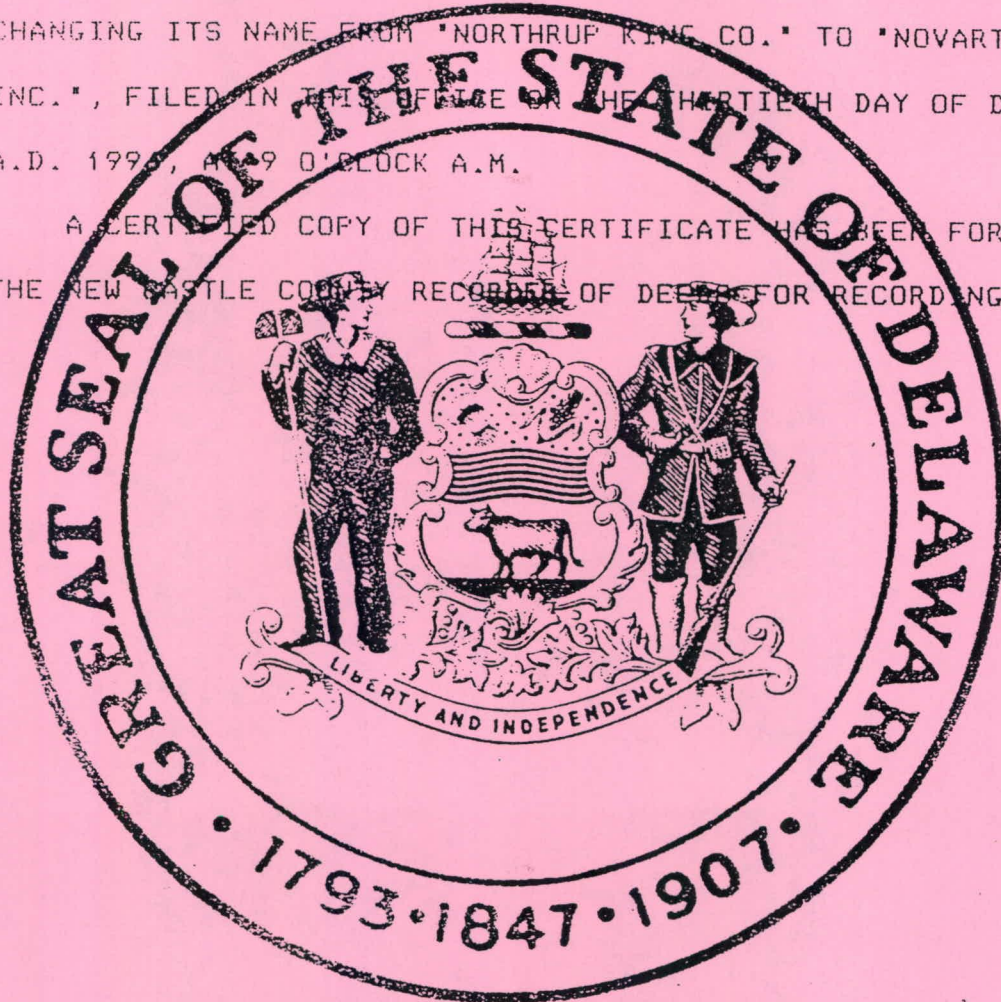




# Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "NORTHRUP KING CO.", CHANGING ITS NAME FROM "NORTHRUP KING CO." TO "NOVARTIS SEEDS, INC.", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF DECEMBER, A.D. 1996, AT 9 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



*Edward J. Freel*

Edward J. Freel, Secretary of State

0829320 8100

960389892

AUTHENTICATION:

8267947

DATE:

12-31-96






CERTIFICATE OF AMENDMENT OF CERTIFICATE OF INCORPORATION  
OF  
NORTHROP KING CO.

It is certified that:

1. The name of the corporation (hereinafter called the "Corporation") is Northrup King Co.
2. The Certificate of Incorporation of the Corporation is hereby amended by striking out Section 1 thereof and by substituting in lieu of said Section the following new Section.
  1. The name of the Corporation is Novartis Seeds, Inc.
3. The amendment of the certificate of incorporation herein certified has been duly adopted and written consent has been given in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.
4. The effective date of the amendment herein certified shall be January 1, 1997.

Signed on December 27, 1996.

  
Edward C. Resler  
Vice President & Secretary



